**8.P.1.1.** Students are able to **classify** matter as elements, compounds, or mixtures.

**Webb Level: 2**
**Bloom: Analysis**

**Verbs Defined:**
Classify- to group

**Key Terms Defined:**
Elements- matter made up of only one kind of atom
Compounds- a chemical combination of two or more different elements
Mixtures – two or more substances that are not chemically combined and can be separated by physical means

**Teacher Speak:**
Students will be able to classify (to group) matter as elements (matter made up of only one kind of atom), compounds (chemical combination of two or more different elements), or mixtures (two or more substances that are not chemically combined and can be separated by physical means).

**Student Speak:**
I can group (classify) matter as:
- being made up of only one kind of atom (elements)
- a chemical combination of two or more different elements (compounds)
- two or more substances that are not chemically combined and can be separated by physical means (mixtures).

**8.P.1.2.** Students are able to use the Periodic Table to **compare** and **contrast** families of elements and to **classify** elements as metals, metalloids, or non-metals.

**Webb Level: 3**
**Bloom: Application**

**Verbs Defined:**
Compare – how things are alike and different
Contrast – how things are different

Classify – categorize

**Key Terms Defined:**
Families of elements – groups of elements with similar properties (ex. valence electrons and reactivity) found in a vertical column on the periodic table
Metals – elements that are good conductors, malleable and ductile
Metalloids – elements that have both metal and nonmetal properties
Nonmetals – elements that lack the physical and chemical properties of metals

**Teacher Speak:**
Students will use the periodic table to compare and contrast families of elements.
Students will classify (categorize) elements as metals (elements that are good conductors, malleable and ductile), metalloids (elements that have both metal and nonmetal properties) or nonmetals (elements that lack the physical and chemical properties of metals).

**Student Speak:**
I can use the periodic table to tell how families or elements are alike and different (compare and contrast).

I can use the periodic table to categorize (classify) elements
- that are good conductors, malleable and ductile (metals)
- that have both metal and nonmetal properties (metalloids)
- that lack the physical and chemical properties of metals (nonmetals).

**8.P.1.3.** Students are able to **compare** properties of matter resulting from physical and chemical changes.

**Webb Level: 2**
**Bloom: Comprehension**

**Verbs Defined:**
Compare – tell similarities and differences

**Key Terms Defined:**
Physical change - the change in the form of a substance but not in its chemical composition
Chemical change- a reaction where different substances with different properties are formed

**Teacher Speak:**
Students will compare (tell similarities and differences) of properties of matter before and after physical changes (the change in the form of a substance but not in its chemical composition).

Students will compare (tell similarities and differences) properties of matter before and after chemical changes (a reaction where substances with different properties are formed).

**Student Speak:**
I can tell similarities and differences (compare) properties of matter before and after the change in the form of a substance but not in its chemical composition (physical changes).

I can tell similarities and differences (compare) properties of matter before and after a reaction where substances with different properties are formed (chemical changes).